THERE'S DATA IN THEM THAR HILLS

A Historical Perspective. By Todd Sander

That rumbling you hear outside government offices across the country may be the prairie schooners of the twenty-first Century rolling toward economic opportunity. Entrepreneurs, homesteaders, visionaries and charlatans are positioning themselves to take advantage of indecisive management of a largely untapped but extremely valuable resource. That resource is data collected by the government and maintained in electronic format.

The last time such valuable government resources were available for the asking was early in the 19th Century. The federal government was encouraging westward expansion. The nation was rich in natural resources and the western frontier held great promise for those willing to exploit it. Land for farms and ranches, timber, and minerals were plentiful. Through purchase and conquest the West now belonged to the American public. Unfortunately, most of the public lived well east of the Mississippi river and did not fully appreciate the value of their newly acquired resources.

The Homestead Act of 1862 gave each participant 160 acres of land in exchange for a promise to improve it for five years. Easy access to federal lands made western mining and ranching attractive and lucrative. Government essentially gave away raw materials to encourage development. The Railroad Act of 1862 offered enormous monetary subsidies and large tracts of land to the Union Pacific and Central Pacific railroads as an incentive to connect and form a coast to coast railroad. Idle land was of little value to the government but exploitation and settlement generated tax revenue.

Government has taken the approach that giving government resources away to private enterprise is a good way to create new opportunity. This approach has been expensive. The Mining Law of 1872 encouraged exploration and development of mineral deposits on western public lands. But today the U. S. Department of Interior has no choice but to sell patents for hardrock minerals on public lands for the 1872 price of \$2.50 to \$5.00 per acre. In December 1995, Interior Secretary Bruce Babbitt signed a mining patent conveying title to 347 acres in the Coronado National Forest in Arizona to a private corporation. The corporation received title to the surface and the rights to nearly \$3 billion in copper and silver deposits. The purchase price paid to the government was \$1745. In April, Secretary Babbitt reluctantly signed a patent conveying title to 40 acres of federal land in Arizona to a mining company. The land contained about \$85 million in gypsum deposits. Taxpayers received approximately \$100 for their land.

To encourage western ranching the Bureau of Land Management and the Forest Service continue to charge less than market rates to ranchers who graze livestock on public lands. Estimates by the Congressional Budget Office and the Committee on Government Operations set the annual loss to taxpayers from not charging market rates at between \$20 million and \$150 million.

Data, collected by the government, and maintained in electronic format, is the great undeveloped public resource of the twenty-first Century. It was created through public investment in technological infrastructure and it belongs to the people. The people have a fundamental right to the data for personal use and to monitor their government. To state it plainly, government must not interfere with individual access to data or access by the public for public purposes.

But government must realize that data is the means of production in an information society. Through data refinement and processing, commercial entities take specific government records and produce information in the same manner that mining companies smelt ore to produce pure gold, silver, and copper. Failure to recognize the economic value of data and to develop policies to ensure equitable exploitation will result in huge profits for a few at the expense of many.

Some argue that it is unreasonable to compare electronic data to minerals and grazing rights. They make the point that the economic laws of scarcity do not apply to data. Unlike grass lands, government can easily and quickly replicate data. However, like other resources, data has a useful life. To be truly useful, people must manage data and keep it clean. Ecosystems provide a context to natural resources. Information systems provide the same context to data. Ecosystems and information systems both must be cared for and maintained. They represent large and lasting investments by taxpayers.

Most agree that it is permissible and desirable for government to lease public grass lands at market price to generate revenue for conservation efforts. It seems reasonable too, that government also recover the cost associated with keeping data and the infrastructure that supports it current and useful. Making government data available for commercial exploitation at the mere cost of photocopying it is the twenty-first Century counterpart to government making public land available for livestock grazing at 10 percent of market cost.

Private companies sell and resell customer lists and demographic profiles at enormous profit. Why should we prohibit government from recovering part of the taxpayers' investment in information systems if the data it produces is valuable and useful to the private sector? In the early days of western exploration government incentives were necessary and helped to build a nation. Early exploration of the electronic frontier was also successful. Pioneers, homesteaders and family farmers in Cyberspace are now being pushed out by corporate conglomerates and foreign owned agri-businesses. Without a coordinated and thoughtful policy on commercial access to government electronic records, government will continue to give away valuable public resources. Without public debate and a well-considered policy, twenty-first Century taxpayers will continue lose their public assets with the quiet efficiency only computer systems can produce.